IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A peptide labeled with fluorine-18, comprising the following peptide sequence (SEQ ID NO: 18):

~~J^1-J^2-J^3-J^4-J^5-J^6-Z^7-U^8-J^9-J^{10}-U^{11}-Arg-J^{13}-J^{14}-U^{15}-Lys-Gly-X^{18}-Gly-Thr-J^{21}-Glu-J^{23}-J^{24}-U^{25}-J^{26}-J^{27}-J^{28}-U^{29}-J^{30}-J^{31}-Arg-J^{33}-J^{34}-J^{35}-J^{36}-B^{37}-J^{38}-J^{39}-U^{40}-J^{41}-J^{42}-J^{43}-U^{44}-J^{45}-J^{46}-J^{47}-J^{48}-J^{49}-Arg-J^{51}-U^{52}-J^{53}-J^{54}-Asp-U^{56}-Lys-Ser-Z^{59}-Leu-J^{61}-J^{62}-J^{63}-J^{64}-Z^{65}-J^{66}-J^{67}-U^{68}-J^{69}-J^{70}-J^{71}-U^{72}-J^{73}-J^{74}-J^{75} (I)~~

J^1-J^2-J^3-J^4-J^5-J^6-Asp-U^8-J^9-J^{10}-U^{11}-Arg-J^{13}-Ala-U^{15}-Lys-Gly-X^{18}-Gly-Thr-J^{21}-Glu-J^{23}-J^{24}-U^{25}-J^{26}-J^{27}-J^{28}-U^{29}-J^{30}-J^{31}-Arg-J^{33}-J^{34}-J^{35}-J^{36}-B^{37}-Gln-J^{39}-U^{40}-J^{41}-J^{42}-J^{43}-U^{44}-J^{45}-J^{46}-J^{47}-J^{48}-J^{49}-Arg-J^{51}-U^{52}-J^{53}-J^{54}-Asp-U^{56}-Lys-Ser-Z^{59}-Leu-J^{61}-Gly-J^{63}-J^{64}-Z^{65}-J^{66}-J^{67}-U^{68}-J^{69}-J^{70}-J^{71}-U^{72}-J^{73}-J^{74}-Ser

in which J, Z, U, X and B represent amino acids such that:

- the amino acids J are chosen independently of each other in such a manner that at least 50% of them are polar residues selected from the group consisting of Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Orn, Pro, Ser, Thr and Tyr,

- the amino acid X^{18} is chosen independently of the other amino acids of the sequence from the group consisting of Ala, Asn, Cys, Gln, Gly, His, Ile, Leu, Met, Phe, Ser, Thr, Trp, Tyr and Val,

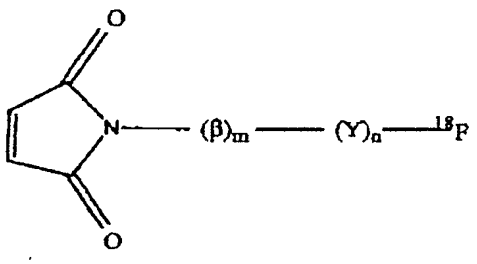
- the amino acids Z^{59} and Z^{65} are chosen independently from the group consisting of Glu, Asp, Lys and Arg,

- the amino acids U and B of the sequence (I) are selected according to one of Examples a) to j) presented in Table 1 below:

	U^{8}	U^{11}	U^{15}	U^{25}	U^{29}	B^{37}	U^{40}	U^{44}	U^{52}	U^{56}	U^{68}	U^{72}
Ex a)	Val	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Val	Leu
Ex b)	Ala	Ile	Ile	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Ile	Leu
Ex c)	Ala	Ile	Ile	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Met	Val
Ex d)	Ala	Leu	Met	Leu	Leu	Arg	Ile	Tyr	Leu	Leu	Ile	Met
Ex e)	Ala	Leu	Met	Ile	Ile	Arg	Val	Tyr	Leu	Leu	Ile	Met
Ex f)	Ala	Leu	Met	Ile	Ile	Arg	Ile	Phe	Leu	Leu	Ile	Met
Ex g)	Ala	Leu	Met	Ile	Val	Arg	Ile	Phe	Leu	Leu	Ile	Phe
Ex h)	Val	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Ile	Met
Ex i)	Ala	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Ile	Met
Ex j)	Ala	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Ala	Ala
Ex k)	Val	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Val	Leu
Ex l)	Val	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Val	Leu

wherein the superscripts of J, Z, U, X and B represent the positions of these amino acids in said sequence, and

wherein said peptide is labeled directly or indirectly with a compound (CI) of general formula:



(CI)

in which:

- m represents an integer from 0 to 10;

- n represents an integer from 0 to 10;

- Y represents a group selected from the group consisting of alkyl groups, monocyclic or bicyclic heterocyclic groups chosen from imidazolyl, pyrazolyl, benzimidazolyl, pyridinyl, piridazinyl, pyrimidinyl, pyrazinyl, triazinyl, quinolinyl, isoquinolinyl, cinnolinyl, quinazolinyl, quinoxalinyl and purinyl groups,

wherein Y may be optionally substituted with one or more substituents

selected independently from the group consisting of hydrogen, (nonradioactive) halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl, C_{1-6} alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups;

- β represents a radical of formula:

$$(\gamma)_a\text{-}((CR_1R_2)_b\text{-}(V)_c)_d\text{-}((CR_3R_4)_e\text{-}(W)_f)_g\text{-}$$

in which:

- a, b, c, d, e, f, g each independently represent an integer from 0 to 10, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9;

- γ, V and W each independently represent $-NR_1$-, -O-, -S-,  ethynyl, $-CR_1=CR_2$, -(C=O)-, -(C=S)-, $-C(=NR_1)$-, -C(=O)O-, -(C=S)S-, $-C(=NR_1)NR_2$-, $-CR_1R_2$-, $-CR_1OR_2$-, $-CR_1NR_2R_3$-, where R_1, R_2, R_3 and R_4 are independently from the group consisting of hydrogen, halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl (C_{1-6})alkoxycarbonyl, aryloxycarbonyl, C_{1-6}

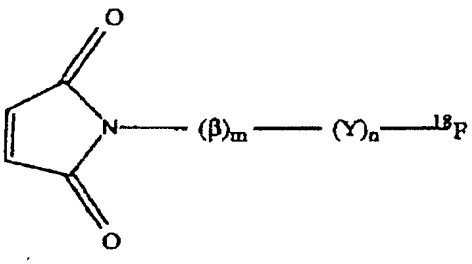
alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups, directly or indirectly on an -SH functional group.

Claim 2 (Previously Presented): The peptide labeled with fluorine-18 according to Claim 1, in which the amino acids J are selected independently of each other from the group consisting of Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, and Val in such a manner that at least 50% of them are polar residues selected from the group consisting of Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Pro, Ser and Thr.

Claim 3 (Canceled)

Claim 4 (Previously Presented): The peptide labeled with fluorine-18 of claim 1 comprising a peptide sequence described by SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, or 14,

wherein said peptide is labeled directly or indirectly with a compound (CI) of general formula:



(CI)

in which:

m represents an integer from 0 to 10;

n represents an integer from 0 to 10;

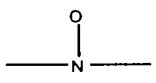
Y represents a group selected from the group consisting of alkyl groups, monocyclic or bicyclic heterocyclic groups chosen from imidazolyl, pyrazolyl, benzimidazolyl, pyridinyl, piridazinyl, pyrimidinyl, pyrazinyl, triazinyl, quinolinyl, isoquinolinyl, cinnolinyl, quinazolinyl, quinoxalinyl and purinyl groups, wherein Y may be optionally substituted with one or more substituents, each of these substituents being selected independently from the group consisting of hydrogen, (nonradioactive) halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl, C_{1-6} alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups;

β represents a radical of formula:

$$(\gamma)_a\text{-}((CR_1R_2)_b\text{-}(V)_c)_d\text{-}((CR_3R_4)_e\text{-}(W)_f)_g\text{-}$$

in which:

a, b, c, d, e, f, g each independently represent an integer from 0 to 10, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9;

γ, V and W each independently represent -NR-$_1$, -O-, -S-,  ethynyl, -CR_1=CR_2, -(C=O)-, -(C=S)-, -C(=NR_1)-, -C(=O)O-, -(C=S)S-, -C(=NR_1)NR_2-, -CR_1R_2-, -CR_1OR_2-, -$CR_1NR_2R_3$-, where R_1, R_2, R_3 and R_4 are independently selected from the group consisting of hydrogen, halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl (C_{1-6})alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups, directly or indirectly on an -SH functional group.

Claim 5 (Previously Presented): The peptide labeled with fluorine-18 of claim 1, further comprising at its N-terminal end, the amino acid sequence Gly-Ser-Cys or Gly-Cys-Ser.

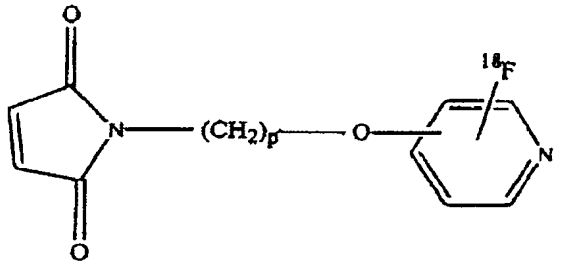
Claim 6 (Previously Presented): The peptide labeled with fluorine-18 of claim 1, further comprising at its N-terminal end, the amino acid sequence Gly-Ser-Gly-Cys (SEQ ID NO: 15), Gly-Cys-Gly-Ser (SEQ ID NO: 16) or Gly-Cys-Gly-Cys (SEQ ID NO: 17).

Claim 7 (Previously Presented): The peptide labeled with fluorine-18 according to claim 1, in which the peptide is labeled directly with the compound (CI) by coupling the maleimide functional group of the compound (CI) with a free -SH functional group of the said peptide, for example the thiol functional group of a cystein of the peptide.

Claim 8 (Previously Presented): The peptide labeled with fluorine-18 according to claim 1, in which the peptide is labeled directly with the compound (CI) by coupling the maleimide functional group of the compound (CI) with a free -SH functional group of the peptide sequence (PI), for example the thiol functional group of a cystein of the peptide sequence.

Claim 9 (Previously Presented): The peptide labeled with fluorine-18 according to claim 1, in which, in the compound of formula (CI), n = 1, and Y is a 3-pyridinyl group.

Claim 10 (Previously Presented): The peptide labeled with fluorine-18 according to Claim 9, in which the compound (CI) corresponds to the following formula (CII):



(CII)

in which p is an integer from 1 to 10.

Claim 11 (Previously Presented): A peptide labeled with fluorine-18 according to Claim 10, in which the compound of formula (CII) is selected from the group consisting of:

1-[2-(2-[^{18}F]fluoropyridin-3-yloxy)ethyl]pyrrole-2,5-dione;

1-[4-(2-[^{18}F]fluoropyridin-3-yloxy)butyl]pyrrole-2,5-dione;

1-[5-(2-[^{18}F]fluoropyridin-3-yloxy)pentyl]pyrrole-2,5-dione;

1-[6-(2-[^{18}F]fluoropyridin-3-yloxy)hexyl]pyrrole-2,5-dione;

1-[(2-[^{18}F]fluoropyridin-3-yloxy)methyl]pyrrole-2,5-dione; and

1-[3-(2-[^{18}F]fluoropyridin-3-yloxy)propyl]pyrrole-2,5-dione.

Claims 12-20 (Canceled)

Claim 21 (Previously Presented): A kit comprising the peptide labeled with fluorine-18 according to claim 1 in form suitable for the analysis and detection of negative charges at the surface of cells.

Claim 22 (Previously Presented): A kit comprising the peptide labeled with fluorine-18 according to claim 1 in form suitable for diagnostic use.

Claim 23 (Previously Presented): A kit comprising the peptide labeled with fluorine-18 according to claim 1 in form suitable for the analysis and detection of microvesicles in blood.

Claims 24-25 (Canceled)

Claim 26 (Previously Presented): A composition comprising a peptide labeled with fluorine-18 according to claim 1 and a pharmaceutically acceptable vehicle.

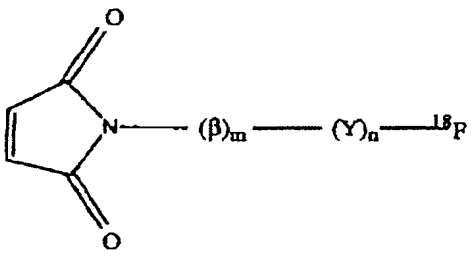
Claim 27 (Previously Presented): A method for detection or analysis of a phospholipid comprising:

contacting a phospholipid with the peptide labeled with fluorine-18 according to claim 1,

and detecting binding, wherein binding indicates the presence of said phospholipid.

Claim 28 (Previously Presented): The method of claim 27, which is positron emission tomography (PET).

Claim 29 (Previously Presented): A peptide labeled with fluorine-18 comprising a peptide sequence described by SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, or 14, wherein said peptide is labeled directly or indirectly with a compound (CI) of general formula:



(CI)

in which:

m represents an integer from 0 to 10;

n represents an integer from 0 to 10;

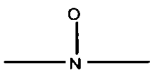
Y represents a group selected from the group consisting of alkyl groups, monocyclic or bicyclic heterocyclic groups chosen from imidazolyl, pyrazolyl, benzimidazolyl, pyridinyl, piridazinyl, pyrimidinyl, pyrazinyl, triazinyl, quinolinyl, isoquinolinyl, cinnolinyl, quinazolinyl, quinoxalinyl and purinyl groups, wherein Y may be optionally substituted with one or more substituents, each of these substituents being selected independently from the group consisting of hydrogen, (nonradioactive) halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl, C_{1-6} alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups;

β represents a radical of formula:

$$(\gamma)_a\text{-}((CR_1R_2)_b\text{-}(V)_c)_d\text{-}((CR_3R_4)_e\text{-}(W)_f)_g\text{-}$$

in which:

a, b, c, d, e, f, g each independently represent an integer from 0 to 10, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9;

γ, V and W each independently represent $-NR_1-$, -O-, -S-,  ethynyl, $-CR_1=CR_2-$, -(C=O)-, -(C=S)-, $-C(=NR_1)-$, -C(=O)O-, -(C=S)S-, $-C(=NR_1)NR_2-$, $-CR_1R_2-$, $-CR_1OR_2-$, $-CR_1NR_2R_3-$, where R_1, R_2, R_3 and R_4 are independently selected from

the group consisting of hydrogen, halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl (C_{1-6})alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups, directly or indirectly on an -SH functional group.